

FOR YOUNG READERS

Do It Now!

When you've got a job to do, Do it now!
If it's one you wish was through, Do it now!
If you're sure the job's your own, Do it now!
Don't hem and haw and growl—Do it now!

Don't put off a bit of work, Do it now!
It doesn't pay to shirk, Do it now!
If you want to fill a place, Do it now!
And be useful to the race, Do it now!
Just get up and take a brace, Do it now!

Don't linger by the way, Do it now!
You'll lose if you delay, Do it now!
If the other fellows wait, Do it now!
Or postpone until it's late, Do it now!
You hit up a faster gait—Do it now!

—Frank Farrington.

Thought Reading by a Watch.

A most puzzling trick is "thought reading by a watch." Place a watch on a table, ask some one to think of a certain hour, and then to consider that he has counted up to that number. Tell him you will point at various hours on the watch, and that he must add the number of times you point to the number of the hour of which he thought. Instruct him that when he reaches No. 20 he must tell you to stop pointing, and you will then be pointing at the hour he selected.

For example: Say he thinks of 7 o'clock. When you have pointed 13 times he must stop you, because he has then counted to 20. Now it does not matter of what hour he thought; at the 20th count you will have arrived at the correct hour if you remember always to let your eighth pointing be to 12 o'clock, and from there to follow the hours around backward, i. e., from 12 to 11, and so on till you are told to stop.

Home-Made Switch.

Get a piece of board 4x5x1/2 in thickness, a piece of copper and some screws and wire; now we are ready to start.

The switch E is made of a piece of copper 1/2 inch wide. It is pivoted at F with a screw.

To the end of E is fastened a copper wire (No. 25), which leads to the upper binding post.

This switch has six contact points. These consist of brass screws and copper or tin washers. Having F as a center, draw the arc of circle that



has a radius of 4 inches. Place the contact screws along this arc and about 1/2 inch apart, center to center; the last screw forms a part of binding post A.

This switch can be also used as a speed regulator for small motors or dynamos.

Mystifying Card Trick.

A simple and mystifying card trick is the will power trick. You let any one shuffle the cards, then take them into your own hand and ask another person to cut them. Now throw them on a table, but as you do so get a glimpse of the bottom card, which is, we will say, the nine of hearts. Scatter the cards a little, but carefully note the position of the nine of hearts.

Now say that you have the power to will that a person shall, unknown to himself, select the card you want. You can call for the nine of hearts. Some one hands you a card without looking at its face. "Thank you," you say. "Quite right—nine of hearts." Really, however, it is the jack of spades; so you now ask for the jack of spades, and get, let us say, seven of diamonds. You then say that you will pick a card from the table yourself—the seven of diamonds. You take the card, however, which you know to be the nine of hearts. You then show the three cards, which are, of course, the three you named, so that it appears that you actually have made your spectators pick out the cards you wanted.

Holland Customs Unchanged.

Almost every fishing village in Holland has its special dress and its own quaint customs. One can see from old Dutch pictures that these have not varied for the last 200 years. One most interesting place is the island of Marken, a tongue of land on the margin of the Zuyder Zee, which can well be inspected in a couple of hours. It is so little above the sea level that the clusters of houses, or tiny villages, are built on mounds connected by bridges, and nearly every little house has its own little moat and its own little boat—everything, except the people, is on a diminutive scale in Holland—moored near the door, so as to be handy in case of flood. The houses, with the exception of the church and the clergyman's house, are built of wood on high piles. They are none of them very old, as the place has often been flooded and burnt; in winter Marken is often under water and the inhabitants use boats to pass from one village to another. The cottages, which are painted blue, green or black, with pointed gables, and

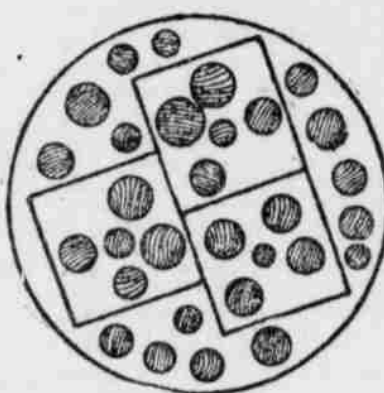
roofed with red tiles, are all exactly alike and possess only a ground door built on high piles.

Fudge Recipe.

A recipe for fudge, the ever fascinating candy which girls love to make, is sent in as follows:

Two cups of white sugar, three tablespoonfuls of cocoa (mix well), about two-thirds cup of milk, a piece of butter about the size of a small egg. Cook until it gets stringy, or else sugars around the edges. Just before taking off the stove add one-half teaspoonful of flavoring. When taken off the stove beat it for a minute or two, or until it gets just hard enough to turn into buttered pans without hardening. This is fine with nuts in. When almost cool cut in squares.

Circle Puzzle.



These are the three equal squares, each containing five of the small circles.

Simple Experiments.

A very interesting branch of study is vibration.

A vibration you know, is defined as an impulse, but if a series or number of impulses are produced singly and at irregular intervals, very little effect upon anything can be produced. If the reverse is true, however, results often astounding will be noticed.

And that, by the way, teaches an important lesson. You cannot do anything of any account by means of a single effort. You must "keep at it," regularly and constantly.

Did you ever, with a playmate, cross a stream walking over a plank, keeping step the while?

What happened? Why, the plank began to jump and bounce until you both came near falling into the water. Your regular footfalls set up vibration, and the plank was obedient to its law.

Probably you know that as a rule soldiers are obliged to break step when crossing a bridge. If they continued marching such vibration would be set up that the bridge would probably fall. In going over a great

many railroad bridges the speed of locomotives must be slackened, because the regular swing of the pistons results in the same manner.

A Tangle Party.

A tangle party is a jolly idea for parents. Lengths of ribbon or colored twine are twisted all over the house, and the children are told that if they can find the end of the thread they can have whatever they will find at the end of it. The ribbons begin in one room and end in another. They are passed through keyholes, twisted around balusters, and perhaps one end is in the garret or in the kitchen.

If presents cannot be bought for all the children two handsome prizes can be purchased instead, one for a girl and one for a boy, and secured to the end of a blue ribbon and red ribbon, respectively. But a little present each is more pleasing, on the whole, as children like to carry home some little souvenir of a party, if it is only a tiny toy or a pretty red notebook or a nice little box of sweets.

Floating Triangle—A Trick.

Here is an interesting experiment, boys and girls:

Take a wet lead pencil point and draw on thick paper a triangle (which need not be mathematically perfect).

Take a basin of water and lay this paper on the surface of the water, with the drawing up. Very carefully fill the space inside the lines with water. (The water will not flow beyond the lines which you drew with your wet lead pencil point).

Next take a needle or pin, dip the point of it into the wet triangle near one of the angles. But don't let it touch the paper.

Now an odd thing will happen; the paper will be sure to move on the water until the center of area comes directly under the point.

You should previously have found where the center of area is by drawing lines from any two angles to the centers of the opposite sides. (See the picture.) The point where the



two lines cross will be the center of area.

Try this interesting experiment.

The small boy's way of saying it in three letters? Mam.

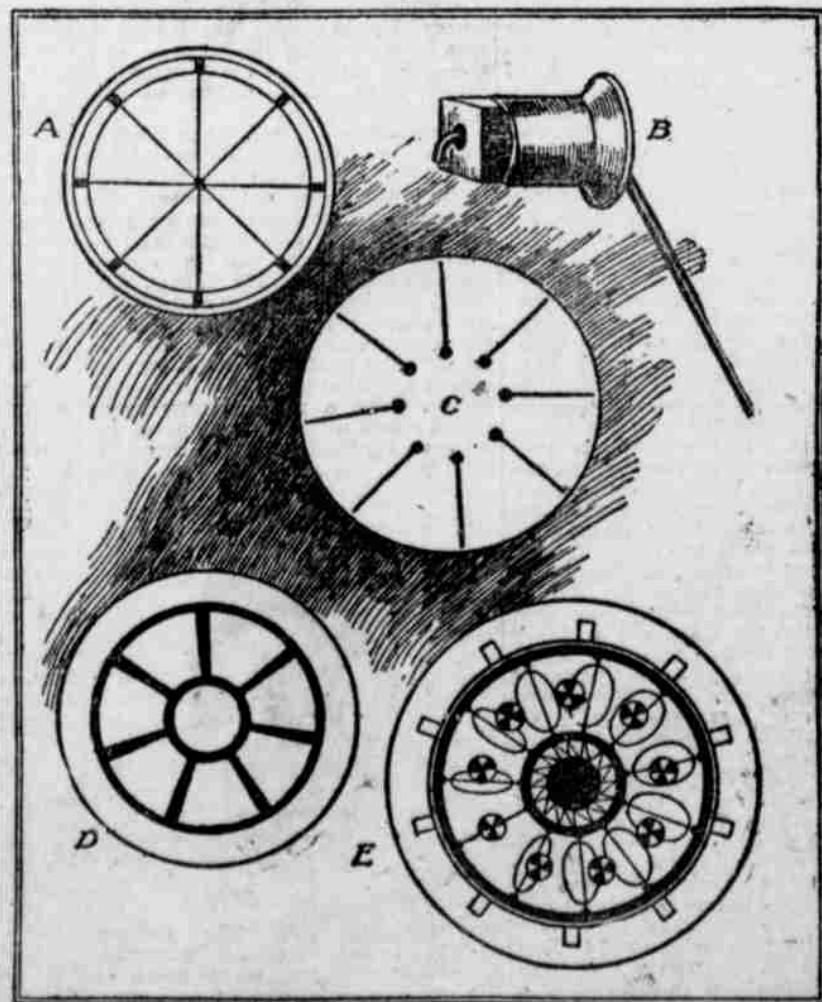
LIVING PICTURES.

To make living pictures provide yourself with a sheet of stiff white cardboard and a spool, one end of which you cut off squarely. Stick the spool on a piece of strong wire, and bend the wire in such a way that the longer end serves as a handle, while the other end keeps the spool from sliding off (see B). Now take your compass and draw a circle seven inches in diameter on the cardboard. Cut the circle out carefully. Draw

at over the end of the spool which is cut off squarely.

Now to make the living pictures. We cut out circles six inches in diameter and copy C and D as they appear in the drawing. Fig. E shows a circle with a design of living pictures attached to the large circle with the little windows.

D is a wheel with seven spokes. We attach the circle to the large circle on the spool with the help of a little wax and stand before a large



a second circle three-eighths of an inch from the edge of the first circle and divide it with a pen into eight parts, which you connect with the center of the circle by lines. A third circle which you draw is seven-eighths of an inch from the edge. Between the two inside circles, at each of the divisions, cut out square windows, as shown in A. Cut out a square at the center of the circle to

mirror, turning the front of the circle toward the glass. Now we give the circle a quick turn with the hand, looking through the little windows at the same time. The wheel will appear to have all its eight spokes instead of seven and will turn in the opposite direction from the circle we hold in our hand. Fig. C will show the pendulum of a clock in motion. Fig. E a ball flying through a ring.

THE GIANT TREES.

One of Them Would Make a Fence Six Feet High and Twenty-four Miles Long.

The only way we can comprehend the greatness of the "big trees" of California without actually seeing them is by comparing them with things of everyday life. Imagine one of these trees being transplanted to the corner of Fifth Avenue and Broadway, New York City. It would make the Fifth Avenue Hotel look like a cottage, and if the largest tree now growing on Manhattan Island were placed on the top of the Flatiron Building, it would still be in the shade of the big tree's upper branches. General Walteuffel stated not long ago that if he could have had one of these big trees to throw across the Pel-ho River upon the arrival of the international army, it would have served as a bridge across which he could have marched the entire 30,000 men into Pekin in forty-five minutes.

It is estimated that some of these trees contain 750,000 feet of lumber, and we may get an idea of what this means when we hear that it would make a board fence six feet high and twenty-four miles long, or that it would supply enough telegraph poles to support a line of wires running from Kansas City to Chicago. If the tallest elm tree you know were cut down and bent into a circle, it would just about make a ring to fit the base of one of the big trees. But it is not their size alone which makes these giants so impressive; their age is still more remarkable. When Cheop's army of 100,000 men began to build the great pyramid of Jeezh, over 2000 years before Christ, these Sequoias, as they are called, had bark on them a foot thick; they were old, old trees when Methuselah was a baby—they are the very oldest living things on the face of the earth. And we Americans should regard them as a priceless heritage, which once taken from us could never be replaced, and we should at any cost guard them forever from those who with ax and saw would in one week undo the work of 5000 years.—Woman's Home Companion.

Utilizing the Dead Sea.

It is believed that before very long the Dead Sea will be exploited for industrial purposes. French engineers are at work on three different projects with this purpose in view. The level of the Dead Sea being more than 1300 feet below that of the Mediterranean and Red seas, it is thought by connecting either of these two seas by means of a canal with the Dead Sea, a stream of water would flow with a velocity calculated to produce some 25,000 horsepower. There is danger, it is asserted, of an overflowing of the Dead Sea, for the waters there evaporate at so great a rate (6,000,000 tons a day) that the incoming waters would make no appreciable difference in the level. One project is to start the canal from the Bay of Acra, lead it southward past Mount Tabor, and let it join at Baisan, the waters of the Jordan. Another plan is to build the canal along the railway line from Jaffa to Jerusalem. But this would mean blasting a tunnel of some thirty-seven miles through the mountains of Old Judea. The third project, the cheapest, proposes to start at Akaba, in the Red Sea, and pass through the desert of Wady-el-Jebel. Having obtained power in this manner, it is thought many industrial works will be carried on.—London Daily News.

Radium as a Pain-Killer.

United States Consul General Guenther, of Frankfurt, writes as follows: Dr. Darier, of Paris, describes a case of cancer of the face which, through application of radium, had been rendered painless. Similar results have been obtained by other noted experts. He has also found quick and pain-killing effects of radium in certain diseases of the eye. The influence of radium upon the motor nerve centres he considers of still greater importance. In two cases of nervous spasms, which occurred three or four times a week, weak radium preparations were applied to the temples for two or three days, when the spasms ceased. In a case also of presumptive inability of motion, caused by nervous debility, radium effected a complete cure within three days—probably, however, through suggestion. In acute facial paralysis of entirely new origin, radium effected a cure in one day. Samples of weak radio-activity are now rather inexpensive, so that other physicians are enabled to verify these results.

Butted In at the Wedding.

Lapd office regulations unfeelingly "butted in" on the plans of Cupid the other day at Waurika and stopped a wedding. Samuel Mosler, a home-steader of that vicinity, has arranged to wed Mrs. Mitchell, a buxom widow, who had but recently made her final proof before the local court commissioners. Just before the ceremony was performed word came that a witness' failure to properly sign his name had caused rejection of the papers by the Interior Department. The wedding was postponed, the groom to be apparently being more willing to temporarily relinquish a bride than to permanently relinquish a farm.—Mangum (Texas) Sun-Mirror.

Old English Customs.

Sir Walter Besant's study of old English customs shows that the doctors of several centuries ago prescribed for fevers "a cold water affusion" with drinking of asses' milk. When the queen was ill in 1693 they shaved her head and applied pigeons to her feet. Powdered mummy for a long time was considered to be a specific against diseases. It is said that the reason it went out of use was that dealers took to embalming bodies and then sold them for genuine ancient mummies.

WITH THE WORLD'S BEST WRITERS

THE CRAZE FOR MONEY.

At the bottom of all the too prevalent corruption, commercial and political, is the prevailing idea that success consists in the gaining of money. Joseph R. Burton of Kansas, the first United States senator to be convicted of crime while in office, testified that he used his official influence in consideration of a salary of \$500 a month from the Rialto Grain and Securities companies of St. Louis, because he needed the money. Those convicted of fraud in the postoffice department at Washington perpetrated the frauds in order to make money. Almost every act of corruption in office is done to get money; and the money that is paid to induce official corruption is paid to obtain wrongful opportunities to make more money. All the dishonest bargains between business men and corporations are merely attempts to make money. People who have no need of more money keep on trying to make money, because that is their only ideal of success. Those who have more money than they can count or use in any way, try to add to it because they are lured on by the idea which has been burned into their minds that making money is success and nothing else is success. Corruption thrives on this false ideal, and will cease only when this false idol is thrown down from the high pedestal on which it stands before the minds of the American people.—Boston Watchman.

EVIL TO HAZER AND HAZED.

There is a sincere belief in the minds of some very intelligent men that hazing has good effect and if not carried too far is "good for the cub" and there is basis for this belief. But it is not easy to see how any good to the lads hazed can compensate for the evil almost inevitably done to hazers. Practically without exception the victim of hazing is helpless in the presence of superior numbers and strength. In other words, the action of the hazers is essentially cowardly. Their motives, if not so deliberately bad as sometimes represented, are in no sense good and to maltreat those who have nothing like a fair chance to resist and almost no chance to inflict injury on their tormentors is not manly, not gentlemanly—is, in fact, cowardly and cruel.—New York Times.

STATISTICS OF INSANITY.

A bureau at Washington has prepared some interesting statistics of the distribution of insanity throughout the United States. In the whole country one person of every 528 is crazy. In New England, one in every 259; in New York and Pennsylvania, one in 424; in Indiana, Ohio, Illinois, Michigan, Maryland, Virginia, Kentucky and Tennessee, one in 619; in the Middle West, one in 750; in the Southern states, one in 935; in the Rocky mountain states, one in 1,263; in the Pacific states, one in 387.

It will be seen that madness is more prevalent in New England than anywhere else, with the Pacific states a close second. The sanest part of the country is in the mountain region of the west, and the south comes next. In Kansas one person out of every 560 is crazy, and Missouri has one for every 602 of population. Some writer, in commenting on these facts, says that if anyone can construct and defend a theory to account for the variation, he is welcome to the opportunity. Still, the report gives some basis for speculation as to causes or reasons. For example, it is shown that the proportion of insanity among foreigners is double that among natives, and that the negro is only half as susceptible to madness as his white brother. This will account for the low rate in the south and the high rate in localities largely peopled by foreigners, but how are we going to account for the big rate in New England and on the Pacific coast?—Kansas City Journal.

WIRELESS TELEGRAPHY IN WAR.

The question of the value of wireless telegraphy in war has already been considered. Now it is supplemented by that of its legality. The Russian government has practically served notice that it regards it as illegal. At any rate, the use of such a device at the seat of war will be treated as a breach of neutrality. Correspondents telegraphing without wires will be shot as spies, and vessels equipped with wireless telegraphic apparatus venturing near the scene of war will, if caught, be confiscated as contraband of war. So far as correspondents accompanying the Russian army are concerned, we may unhesitatingly concede the Russian right of censorship. That is a matter of course. A belligerent power has the undoubted right to decide whether it will permit correspondents to accompany its army at all, of course, prescribe what matter may be sent through the lines, and how. Similarly, it may exercise a censorship over new vessels entering its territorial waters, or the waters implicated in the sphere of belligerent action. But a general outlawing of wireless telegraphy in that part of the world would be a much more extreme matter.—New York Tribune.

PRECEPT AND EXAMPLE.

Thinking to make an impression on the boys of London, the Times recently published a manifesto carrying an enormous show of great names, such as the duke of Fife, the archbishop of Canterbury, the bishop of London and eleven leading lords of the realm, severely enjoining all religious teachers to discourage cigarette smoking among the young, as it was rapidly sapping the vitality of the kingdom.

It is to be feared that this method still lacks the power of example sufficiently, for the greatest men in England still smoke. The priests of India and Japan all smoke and the champion smoker of the world is probably the king of Portugal, who smokes forty cigars a day. Dean Swift used to smoke throughout his whole sermon. What might not the boys quote as to great names?—Boston Globe.

WIRELESS TELEGRAPHY AT SEA.

Marconi seems to be "doing things" which are of value in the commercial development of wireless telegraphy. He kept the Campana in communication with Poldhu for a distance of 1,700 miles, which was somewhat more than half way across. On the return voyage he will try the same experiment with the Cape Cod Station and if, when that is lost, he can pick up Poldhu the ship will never be out of communication a day on its voyage across.

This is practical. During its voyage the Campana was in more or less frequent communication with the Etruria, Lucania, Minnetonka, Vaderland, and Deutschland. Thus the solitude of the ocean is invaded and the rest of a voyage is broken by enough news to make one want more. This, however, is what the average man wants. The fact that he will be "a long time dead" seems to have dawned upon him and incited him to an intensity of living while he lives which makes rest irksome and isolation impossible. Even when he thinks he wants a rest he is mistaken. Hence the popularity of the Marconi equipment on ships crossing the ocean.—New York Times.

GOOD DONE BY THE KICKER.

The established order is always and everywhere impatient with the man who challenges it. In sneers and anger and sharp rebuke it tries to suppress him. He is a nuisance and a mischief-maker, as devoid of sense as he is of perspective, and so on. The kicker who will continue to kick under such conditions has his high value. Society needs him, and so does every legislative body. He may be wrong at times, his views may embrace and consider only part of a subject, but if he be honest and persistent he awakens discussion, he draws out facts, and so in the long run illuminates public problems in a way that is helpful.—Springfield (Mass.) Republican.

THE AGE OF ALUMINUM.

Ever since the separation of the metal aluminum from its ores—and every claybank is an aluminum mine—inventors have dreamed of an "aluminum age," whose mechanical marvels should leave as far behind the present "age of steel" as we surpass the "age of stone" of the primitive man. Here was a beautiful metal that was only a third as heavy as iron; and what limit could there be to the wonders its use would make possible. The long-awaited alrship was to become a reality and a revolution was to come at once in shipbuilding, railroading and automobilism.

But little can be done with a metal so soft that to secure the same strength as much aluminum in weight as of iron must be used. If only some way of tempering it could be found!

Now the announcement comes from Germany that this problem has been solved. "Meteorit" is a simple alloy of aluminum and phosphorus, and for it is claimed that it is six times as strong as aluminum itself, is noncorrosive, highly polishable, and may be soldered and galvanized with nickel or copper. If all that is claimed for it is true, then the "age of aluminum" may not be far distant.—Boston Globe.

BRAVE MEN ON BOTH SIDES.

The fact is frequently and pleasantly observed that the soldiers on both sides in the Asian war are displaying valor. The Russians find in that some consolation for the grievous losses they have suffered. Their seamen at Chemulpo and their soldiers at the Yalu were beaten and perished, but at least they fought bravely and fell like heroes. The Japanese find in the same circumstance an added cause for exultation over their victories. Their seamen eagerly enlisting for a death errand at Port Arthur and their soldiers storming intrenchments with the bayonet at the Yalu have added new lustre to the fame of Samurai heroism. Nor is that all. Each side has learned to recognize the valor of the other and to pay it the tributes which are its due. Whatever may have been their opinions of each other before the war, these last three months have inspired them both with the respect which brave men feel for each other the world around.—New York Tribune.